CLAIMS

WE CLAIM:

1.   A method of treating a vascular disease in a subject, comprising administering to said subject an inhibitor of a cysteine protease.

2.   The method of claim 1, wherein said vascular disease is athersclerosis.

3.   The method of claim 1, wherein said vascular disease is an aneurismal aortic lesion.

4.   The method of claim 1, wherein the vascular disease is selected from the group consisting of atherosclerosis, myocardial infarction, unstable angina pectoris, abdominal aortic aneurysm, and tumor-induced vascular lesions.

5.   The method of claim 1, wherein the cysteine protease is selected from the group consisting of cathepsin S, cathepsin K, and cathepsin L.

6.   The method of claim 1, wherein said inhibitor comprises a cystatin.

7.   The method of claim 1, wherein said inhibitor comprises a cystatin C polypeptide.

8.   The method of claim 7, wherein said polypeptide comprises a cystatin C active site.

9.   The method of claim 1, wherein said inhibitor is administered locally to a site of vascular injury.

10.   The method of claim 1, wherein said inhibitor is administered systemically.

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11.   A method of preventing development of a vascular disease in a subject, comprising administering to said subject an inhibitor of a cysteine protease.

12.   The method of claim 11, wherein said subject is at risk of developing a vascular disease.

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13.   A method of treating a vascular disease in a subject, comprising administering to said subject transforming growth factor beta.

14   A method of preventing development of a vascular disease in a subject, comprising administering to said subject transforming growth factor beta.

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15.   A method of identifying a subject suffering from or at risk of developing a vascular injury, comprising

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(a)   measuring the amount of cystatin C in a subject-derived serum sample; and

(b)   comparing said amount to a control cystatin C value, wherein a decrease in said amount compared to said control value indicates that said subject is suffering from or at risk of developing a vascular injury.

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16.   The method of claim 15, wherein said injury is atherosclerosis.

17.   The method of claim 16, wherein said amount is at least 50% less than said control value.

18.   The method of claim 16, wherein said amount is less than 1 microgram/milliliter.

19.   A method of identifying a subject suffering from or at risk of developing a vascular injury, comprising

    (a)   measuring the amount of cystatin C in a subject-derived serum sample;

    (b)   comparing said amount to the amount of serum creatinine from said subject,

wherein a decrease in the ratio of cystatin C to creatinine compared to control ration indicates that said subject is suffering from or at risk of developing a vascular injury.

20.   The method of claim 19, wherein said vascular injury is aortic aneurysm

21.   A method of identifying a patient suffering from or at risk of developing a vasular disease, comprising measuring the rate of cystatin C clearance in said patient, wherein a decrease in said rate compared to a control rate indicates that said patient is suffering from or at risk of developing a vascular disease.